

中国埃蝗属的分类研究及一新种记述

(直翅目:蝗总科:剑角蝗科)

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摘要:记述分布于我国的埃蝗属 *Eoscyllina* 5 种,其中有 1 新种,即黑龙江埃蝗 *Eoscyllina heilongjiangensis* Zheng et Xu, sp. nov., 附有分种检索表和种类分布情况。模式标本保存于陕西师范大学动物研究所昆虫标本室。

关键词:直翅目;蝗总科;剑角蝗科;分类;新种;中国

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A taxonomic study of the genus *Eoscyllina* Rehn (Orthoptera: Acridoidea: Acrididae) from China with description of a new species

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Abstract: The genus *Eoscyllina* Rehn from China was reviewed, with five species recorded, including a new species: *Eoscyllina heilongjiangensis* Zheng et Xu, sp. nov. Key to species of *Eoscyllina* from China is provided. Type specimens are kept in the Institute of Zoology, Shaanxi Normal University.

Key words: Orthoptera; Acridoidea; Acrididae; taxonomy; new species; China

埃蝗属 *Eoscyllina* 为 Rehn 于 1909 年建立 (Rehn, 1909), 为剑角蝗科中一个小属, 已知 7 种, 分布于印度尼西亚、菲律宾和中国。在我国主要分布于海南、广西、贵州及黑龙江等省区, 共计有 5 种, 其中包括 1 新种。模式标本保存于陕西师范大学动物研究所昆虫标本室。

埃蝗属 *Eoscyllina* Rehn, 1909

Eoscyllina Rehn, 1909, *Bull. Amer. Mus.*, 26: 186; Willemse, 1951, *Publ. Natuurh. Genoot. Limburg*, 4: 57–58; Zheng, 1985, *Acridoidea from YGSSN Regions*: 363; Zheng, 1993, *Acritaxonomy*: 380; Liu et al., 1995, *Studies on Acridoids of Hainan Island*: 108; Yin et Xia, 2003, *Fauna Sinica, Insecta v. 32, Orthoptera, Acridoidea, Gomphoceridae and Acrididae*: 94.

Bakereolla Bolivar, 1914, *Trab. Mus. Nac. Cienc. Nat.*

Zool., 20: 49

模式种: *Eoscyllina inexpectata* Rehn, 1909

体中小型, 较匀称。头顶近三角形, 侧缘隆线明显, 向后一直延伸到后头。头侧窝明显, 四角形, 从背面可见。颜面倾斜, 颜面隆起具宽纵沟, 在中单眼之上具有 1 条中隆线。触角细长, 狭剑状, 超过前胸背板后缘, 基部数节宽扁, 其余节较长。复眼长卵形。前胸背板较长, 具明显的中、侧隆线; 后横沟位于背板近中部; 前缘平直, 后缘钝角形或近圆弧形; 后胸腹板在后端毗连或分开。前、后翅发达, 常超过后足股节顶端, 翅顶狭圆形。后足股节内侧下隆线具 1 列发音齿; 膝侧片顶圆形。后足胫节缺外端刺, 内侧之上、下距不等长, 顶端呈钩状。雄性肛上板三角形, 尾须锥形, 下生殖板短锥形。雌性产卵瓣较短粗, 外缘无细齿。

中国埃蝗属分种检索表

- 1(4)前胸背板在中、侧隆线之间具有 1 条附加纵隆线
- 2(3)中胸腹板侧叶宽略大于长,中隔近长形;后足股节外侧、上侧黄褐色,内侧橙黄色,下侧黄褐色 贵州埃蝗 *Eoscyllina kweichouensis* Cheng
- 3(2)中胸腹板侧叶宽大于长 1.5 倍,中隔呈梯形;后足股节外侧、上侧近端部 2/3 暗褐色,其余部分为黄褐色,内侧及下侧暗红色,上膝侧片黑褐色 五指山埃蝗 *Eoscyllina wuzhishanensis* Liu et al.
- 4(1)前胸背板在中、侧隆线之间不具有附加纵隆线
- 5(8)前胸背板后缘钝角形;后胸腹板侧叶在后端毗连
- 6(7)头侧窝狭长,窝长为宽的 6.2 倍;雌性复眼纵径为眼下沟长度的 2.4 倍;雄性腹部末节背板不具尾片;后足胫节橙黄色 瑶山埃蝗 *Eoscyllina yaoshanensis* Li et You
- 7(6)头侧窝短宽,长为宽的 2.1 倍;雄性腹部末节背板具小尾片;后足胫节淡橙色 广西埃蝗 *Eoscyllina guangxiensis* You et Li
- 8(5)前胸背板后缘近圆弧形;后胸腹板侧叶在后端分开 黑龙江埃蝗 *Eoscyllina heilongjiangensis* sp. nov.

Key to species of *Eoscyllina* Rehn from China

- 1(4)Pronotum with a additional carina between median carina and lateral carina.
- 2(3)Width of lateral lobes of mesosternum slightly larger than its length, interspace of mesosternal lobes nearly square; outer, upper and lower sides of hind femur yellowish-brown, inner side orange-yellow *Eoscyllina kweichouensis* Cheng
- 3(2)Width of lateral lobes of mesosternum 1.5 times its length, interspace of mesosternal lobes trapazoid; outer and upper sides of hind femur near the the top two thirds dark brown, and other part yellowish brown, inner and lower sides dark red, upper knee lobe black brown *Eoscyllina wushishanensis* Liu et al.
- 4(1)Pronotum without a additional carina between median carina and lateral carina.
- 5(8)Hind margin of pronotum obtuse; metasternal lobes contiguous each other.
- 6(7)Foveola long narrow, length of foveola 6.2 times its width; in female, longitudinal diameter of eyes 2.4 times the length of subocular furrow; in male, last tergite of abdomen without furculae; hind tibia orange red *Eoscyllina Yaoshanensis* Li et You
- 7(6)Foveola wide and short, length of foveola 2.1 times its width; in female, longitudinal diameter of eyes 3.4 times the length of subocular furrow; in male, last tergite of abdomen with small furculae; hind tibia light orange *Eoscyllina guangxiensis* You et Li
- 8(5)Hind margin of pronotum nearly arc-shaped; metasternal lobes separated each other *Eoscyllina heilongjiangensis* sp. nov.

1 贵州埃蝗 *Eoscyllina kweichouensis* Cheng, 1977
Eoscyllina kweichouensis Cheng, 1977, *Acta Entomol. Sin.*, 20(3): 307; Zheng, 1985, Acridoidea from YGSSN Regions: 364 – 365; Zheng, 1993, Acritaxonomy: 380; Jiang and Zheng, 1998, Grasshoppers and Locusts from Guangxi: 238; Yin and Xia, 2003, Fauna Sinica, Insecta v. 32, Orthoptera, Acridoidea, Gomphoceridae and Acrididae: 95 – 96.

观察标本: 1 ♀ 贵州: 罗甸, 1974-Ⅹ-15; 2 ♂ 3 ♀ 广西: 靖西, 1994-X-20; 1 ♂ 1 ♀, 广西: 凭祥, 1995-X-21。

分布: 贵州、广西、福建。

2 五指山埃蝗 *Eoscyllina wuzhishanensis* Liu et al., 1995
Eoscyllina wuzhishanensis Liu et al., 1995, Studies on Acridoidea of Hainan Island: 108; Yin and Xia, 2003, Fauna Sinica, Insecta v. 32, Orthoptera, Acridoidea, Gomphoceridae and Acridoidae: 100.

观察标本: 未见标本, 根据文献记载。
分布: 海南。

3 瑶山埃蝗 *Eoscyllina Yaoshanensis* You et Li, 1987
Eoscyllina Yaoshanensis You et Li, 1987, *Entomotaxonomia*, 9 (4): 303 – 304; Zheng, 1993, Acritaxonomy, 380 – 381; Jiang and Zheng, 1998, Grasshoppers and Locusts from Guangxi, 239 – 340; Yin and Xia, 2003, Fauna Sinica, Insecta v. 32, Orthoptera, Acridoidea, Gomphoceridae and Acridoidae: 98 – 100.

观察标本: 5 ♂ 7 ♀, 广西: 金秀, 1996-Ⅹ-20。
分布: 广西。

4 广西埃蝗 *Eoscyllina guangxiensis* Li et You, 1987
Eoscyllina guangxiensis Li et You, 1987, *Entomotaxonomia*, 9 (4): 304 – 305; Zheng, 1993, Acritaxonomy, 381; Jiang and Zheng, 1998, Grasshoppers and Locusts from Guangxi, 239 – 340; Yin and Xia, 2003, Fauna Sinica, Insecta v. 32, Orthoptera, Acridoidea, Gomphoceridae and Acridoidae: 97 – 98.

观察标本: 2 ♂ 1 ♀, 广西: 靖西, 1994-Ⅹ-20; 1 ♂ 1 ♀; 广西: 金秀, 1996-Ⅹ-19。
分布: 广西。

5 黑龙江埃蝗,新种 *Eoscyllina heilongjiangensis*
Zheng et Xu, sp. nov. (图 1-4)

雄性:体小型。头部短于前胸背板;头顶呈三角形,自复眼的前缘至头顶顶端的长度短于复眼的纵径,侧缘隆线明显,直延伸至后头,头顶具中隆线;头侧窝狭长,长为宽的3倍;颜面倾斜,与头顶形成锐角形,颜面隆起具纵沟,侧缘近平行,在中央单眼之上具一短纵隆线。触角狭剑状,细长,到达后足股节基部近1/3处,基部3~6节宽扁,其余各节圆柱形。复眼长卵形,复眼纵径为横径的2倍,为眼下沟长的2倍。前胸背板圆柱形,前缘平直,后缘呈圆弧形突出;中、侧隆线均明显,侧隆线近平行,在中部微曲;仅后横沟明显,切断中、侧隆线,沟前区长度为沟后区长度的1.4~1.5倍;前胸背板侧片长高近相等,前下角钝角形,后下角直角形。中胸腹板侧叶宽略大于长,中隔近方形;后胸腹板侧叶在后端狭分开。前翅狭长,超过后足股节顶端,各个脉域均不具闰脉;中脉域的宽度大于前缘脉域宽,肘脉域与前缘脉域近等宽。后足股节匀称,长为宽的4倍,上侧中隆线平滑,膝侧片顶圆形。后足胫节外侧具刺13个,内侧具刺12个,缺外端刺;后足胫节顶端内侧的下距略长与上距,距端部钩状。鼓膜器发达,孔近半圆形。肛上板三角形,中央具纵沟。尾须锥状,到达肛上板顶端。下生殖板短锥形,顶端较尖。

表 1 黑龙江埃蝗于近似缘种之主要区别

Table 1 Differences between <i>Eoscyllina heilongjiangensis</i> Zheng et Xu, sp. nov. and its allies			
	瑶山埃蝗 <i>E. yaoshanensis</i>	黑龙江埃蝗 <i>E. heilongjiangensis</i>	广西埃蝗 <i>E. guangxiensis</i>
头侧窝长为宽的	6.2 倍	3 倍	2.1 倍
雌性复眼纵径为眼下沟的	2.4 倍	1.3~1.6 倍	3.4 倍
雄性腹部末节背板	不具尾片	不具尾片	具小尾片
后足胫节	橙黄色	黄褐色	淡橙红色

体黄褐色,具黑色眼后带。前翅黄褐色。后足股节橙黄褐色。后足胫节黄褐色。

雌性:体中小型,复眼纵径为横径的2~2.2倍,为眼下沟长的1.3~1.6倍。肛上板三角形。尾须短锥形。产卵瓣粗短,外缘不具细齿。下生殖板长大于宽,后缘中央三角形突出。

体背面黑褐色(包括头部背面、前胸背板背面及前翅),有少数个体背面黄褐色。眼后带较宽黑色,直延至前胸背板后缘。颊部、前胸背板侧片下半部,中、后胸侧板黄褐色。后足股节黄褐色。后足胫节黄褐色。

体长:♂13.5-16 mm;♀17-21 mm;前胸背板长:♂2-2.5 mm;♀2.5-4 mm;前翅长:♂10-14 mm;♀15-19 mm;后足股节长:♂9-9.5 mm;♀10-14 mm。

正模♂,黑龙江:漠河,2007-IX-3;副模1♂1♀,黑龙江:漠河,2007-IX-3;2♀黑龙江:北极村,2007-IX-1;3♀,黑龙江:塔河,2007-VIII-31;1♀黑龙江:嫩江,2007-VIII-30;1♂2♀,黑龙江:五大连池,2007-VIII-25;1♀,黑龙江:北安,2007-VIII-27。标本采集人:孙慧敏,许姝娟,李鑫,张小静。

该新种近似于瑶山埃蝗 *E. yaoshanensis* Li et You, 1987 及广西埃蝗 *E. guangxiensis* You et Li, 1987, 主要区别见表 1。

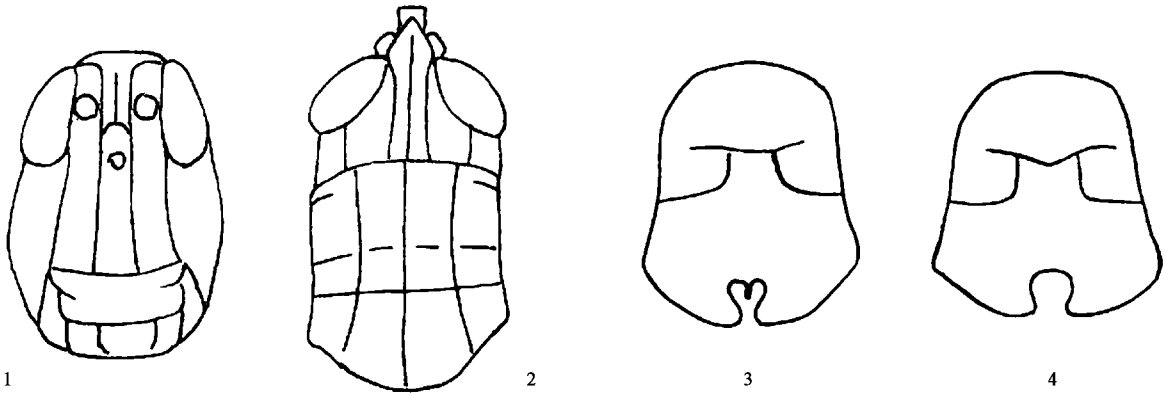


图 1-4 黑龙江埃蝗 *Eoscyllina heilongjiangensis* Zheng et Xu, sp. nov.

Figs. 1-4 *Eoscyllina heilongjiangensis* Zheng et Xu, sp. nov.

1. 头部前面观 Head, front view; 2. 头、前胸背板背面观 Head and pronotum, dorsal view;
3. ♂, 中、后胸腹面 Mesothorax and metathorax, ventral view; 4. ♀, 中、后胸腹面 Mesothorax and metathorax, ventral view.

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Appendix: Brief Description of New Taxa

Eoscyllina heilongjiangensis Zheng *et* Xu, sp. nov. (Figs. 1 – 4)

This new species is allied to *E. yaoshanensis* Li *et* You, 1987 and *E. guangxiensis* You *et* Li, 1987. It differs from the latter two species in : 1) length of foveola 3 times its width ; 2) in female, longitudinal diameter of eyes 1.3 – 1.6 times the length of subocular furrow ; 3) hind tibia yellow-brown. It differs from the former by the last tergite of abdomen without furcula.

- Length of body : ♂ 13.5 – 16 mm ; ♀ 17 – 21 mm ;
- Length of pronotum : ♂ 2 – 2.5 mm ; ♀ 2.5 – 4 mm ;
- Length of elytra : ♂ 10 – 14 mm ; ♀ 15 – 19 mm ;
- Length of hind femur : ♂ 9 – 9.5 mm ; ♀ 10 – 14 mm.

Holotype ♂, Heilongjiang: Mohe, 122°5' E, 52°8' N, 3-IX-2007; 3 ♀, Heilongjiang: Tahe, 124°7' E, 52°5' N, 31-V-2007; 1 ♀, Heilongjiang: Nenjiang, 125°2' E, 49°2' N, 30-VIII-2007; 1 ♂ 2 ♀, Heilongjiang: Wudalianchi, 126° E, 48°8' N, 25-VIII-2007; 1 ♀, Heilongjiang: Bei 'an, 126°5' E, 48°2' N, 27-VIII-2007. Collected by Sun HM, Xu SJ, Li X and Zhang XJ.